



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of: **KOIKE, et al.**

Group Art Unit: 2872

Serial No.: 09/642,883 ✓

Filed: August 22, 2000 ✓

Examiner: **CHANG**

P.T.O. Confirmation No. 8966

For: **PLANE DIFFRACTION GRATING BASED ON SURFACE NORMAL  
ROTATION AND ITS APPLICATION TO AN OPTICAL SYSTEM**

AMENDMENT UNDER 37 CFR §1.111

Commissioner for Patents  
Washington, D.C. 20231

RECEIVED  
JAN 28 2003  
TECHNOLOGY CENTER 2800  
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January 27, 2003

Sir:

In response to the Office Action dated **October 25, 2002**, please amend the above-identified application as follows:

IN THE CLAIMS:

AMEND claims 1, 6 and 11 as follows:

1. (Thrice Amended) A static plane diffraction grating with grooves formed on a surface thereof, the plane diffraction grating being rotated about a rotational axis which is normal to the surface, and being characterized in that a profile of the grooves at a radial area is determined depending on an azimuthal position  $\phi$  of the area about a rotational center defined as a foot of the rotational axis on the surface of the plane diffraction grating for maximizing a diffraction efficiency of the radial area.